



**U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT  
BUREAU FOR DEMOCRACY, CONFLICT, AND HUMANITARIAN ASSISTANCE (DCHA)  
OFFICE OF U.S. FOREIGN DISASTER ASSISTANCE (OFDA)**

***ALGERIA – Floods***

Fact Sheet #1, Fiscal Year (FY) 2002

November 30, 2001

**Overview/Numbers Affected**

- On November 10, 2001 violent gales and a deluge of rain lasting over 24 hours hit northern Algeria causing massive mudslides and flood damage. The Government of Algeria (GOA) declared the Algiers, Oran, and Tipaza regions disaster areas, with most of the damage occurring in the capital city of Algiers. Sixteen of the country's 48 provinces were affected.
- On November 26, the GOA reported that the number of deaths attributed to the flooding had reached 751. Of this total, an estimated 700 were located in Algiers. Many of the victims were swept away by torrents of rainwater rushing down from the hills of the city. Unauthorized housing, built in dry riverbeds, collapsed as a result of the swelling, causing rubble and debris to inundate the lower parts of the city. The GOA reports that the floods left an estimated 40,000 to 50,000 individuals homeless.
- According to U.N. Office for the Coordination of Humanitarian Affairs (UNOCHA), seven communes of Algiers were seriously affected by the floods: Bab-El-Oued, Oued Koriche, Bouloghine, Raïs Hamidou, Hammamet, Aïn Bénian, Bouzaréah. The most severely affected of these communes was Bab el Oued, where 651 people were reported to have died. Another four communes were deemed partially affected: Dély Ibrahim, El-Biar, La Casbah, Alger-Centre.
- On November 26, the GOA estimated that 2,700 buildings were severely damaged in the floods, 37 schools remained closed in the districts of Bab-El-Oued and Bouzareah, and an estimated 109 roads were damaged, although many have been reopened. The GOA estimates the total cost of the damage at more than \$300 million.

**Current Situation**

- After an assessment of the affected areas by USAID/OFDA's Urban Disaster Specialist on 17-20 November, it was determined that the flood was exacerbated by the inability of the affected areas to retain floodwaters. This lack of retention was caused primarily by the over development of housing and roadways in the natural valleys present in the hilly terrain in many parts of Algiers, called *oueds*. These *oueds*, while the choice of settlement for many, are extremely susceptible to flash floods.
- In addition to the over development of the *oueds* in Algiers, the geography and population density of the city also played major roles in the devastation. Algiers, with an estimated population of 3.5 million, is geographically constrained by the Mediterranean Sea to the North and steep hills to the South. In the most affected area of the city, population density is greater than that of Manhattan, but the watershed of that area is estimated at only five square miles, with steep slopes, and elevation rising to 1,300 feet. The result of these factors was tremendous amounts of water being forced through densely populated areas out to the sea.
- Search and rescue (SAR) operations in Algiers ended during the week of November 19. SAR teams were sent from Belgium, France, Morocco, and Tunisia. The focus has now shifted to search and recovery, and the massive clean up effort. According to UNOCHA, more than 1.1 million cubic meters (m<sup>3</sup>) of mud have been removed from the most severely affected areas to date. However, another 800,000 m<sup>3</sup> still needs to be removed. The GOA has deployed thousands of soldiers to affected areas to assist in the recovery of victims as well as the general clean up.
- While the clean up effort continues, UNOCHA reports that medical experts have been monitoring the affected areas for water-borne diseases. To date, none have been reported.

**U.S. Government Response**

- On November 13, the U.S. Chargé d'Affaires issued a disaster declaration for flooding following the GOA international appeal for assistance. USAID/OFDA immediately responded to the disaster by providing \$25,000 to the Algerian Red Crescent Society (ARCS) via the U.S. Embassy for the local procurement of bedding, clothing, and emergency supplies for affected individuals.
- On November 16, USAID/OFDA deployed its Urban Disaster Specialist to provide timely technical assistance and guidance to the GOA, City of Algiers, and other officials on a wide range of shelter, housing, and reconstruction issues. In addition, the specialist also provided input on flood mitigation, watershed management, urban/regional land use planning, and environmental management matters.

- On November 16, USAID/OFDA airlifted 10,005 blankets and 3 medical kits (each serving 10,000 people) from Pisa, Italy to Algiers. The total value of the blankets and medical kits, including transport, was \$103,190.
- On November 28, a second airlift of USAID/OFDA commodities containing 100 heaters and 100 generators arrived in Algiers from Pisa. The total value of the heaters and generators, including transport, was \$113,745.
- USAID/OFDA will deploy a Regional Advisor to Algeria during the week of December 3 to further assess the humanitarian impacts of the flooding and determine whether additional USAID/OFDA assistance is necessary. USAID/OFDA will continue to closely monitor the situation.

#### **International Response**

- In addition to USAID/OFDA's assistance to Algeria, several other donors have also contributed to the response including: Belgium, Canada, France, Morocco, Sweden, Monaco, Netherlands, Spain, Switzerland, Norway, United Kingdom, Mauritania, Saudi Arabia, Qatar, Germany, Libya, Italy, and other donor, U.N., International, and Non-Governmental Organizations.

#### **U.S. Government Assistance**

USAID/OFDA .....	\$241,935
<b>Total USG Assistance in FY 2002, to date .....</b>	<b>\$241,935</b>

*USAID/OFDA fact sheets can be obtained from the USAID web site at [http://www.usaid.gov/hum\\_response/ofda/situation.html](http://www.usaid.gov/hum_response/ofda/situation.html)*